

Aviation Education News



Distributed Quarterly to Promote Aviation Education and Awareness in Virginia

November 2005

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Marines Toys for Tots Drive at Louisa Airport

Starting November 14, 2005, unwrapped toys will be collected at the Louisa County Airport/Freeman Field Monday through Saturday from 8:30 a.m. - 5:00 p.m. and on Sunday's from 10:00 a.m. - 5:00 p.m. Deadline for the collection of toys is December 14th.

Contact Dawn Pickhardt Howard, Airport Manager, at (540) 967-0050 with questions about the program.



2006 Aviation Scholarship Programs

John R. Lillard Aviation Scholarship Program

The John R. Lillard Scholarship Program is funded by members of the Virginia Airport Operators Council (VAOC). Quoting Bryan O. Elliott, A.A.E. who chairs the scholarship committee, "The scholarship ... is named for a friend, aviation enthusiast and great humanitarian. Through his leadership positions with the Capital Region Airport Commission (which operates Richmond International Airport), Chesterfield County Airport, and Eastern Airlines, John always displayed a zeal and thirst for life, aviation, family and friends. Because of his great spirit, we seek to share and commemorate his unique and special gifts with others."

See page Page 3 for the Lillard Scholarship Application Form

Willard G. Plentl Aviation Scholarship Program

Willard G. Plentl, Sr. was born in Houston, Texas and began pilot training in the Army Air Corps in 1942. After his retirement from the Air Force as a Lieutenant Colonel in 1962, Mr. Plentl accepted a position with the Commonwealth of Virginia as Assistant Director, Division of Aeronautics (later Virginia Department of Aviation) and in 1964 he became Director of Aeronautics. He retired from the Department of Aviation in 1984 and was elected to the Virginia Aviation Hall of Fame that same year. Mr. Plentl passed away on May 19, 2005 leaving behind a devoted family and a record of outstanding service to aviation. In honor of this remarkable gentleman and his years of service to the Commonwealth of Virginia, this scholarship program has been established.

See page Page 5 for the Plentl Scholarship Application Form

Rules for Application:

Virginia high school seniors who are planning a career in aviation are eligible to apply. The Plentl scholarship is limited to non-engineering students.

- 1. Complete the application form.
- 2. Have your guidance counselor or other high school official sign all required certifications.
- 3. Attach an official copy of your current high school transcript and a copy of acceptance letters or other verification of enrollment or acceptance into a post-secondary institution.
- 4. Attach to the application a typed, double-spaced essay (350 word minimum/500 word maximum) on the subject: "Why I Wish to Pursue a Career in Aviation."
- 5. Attach recommendation letters (no more than three) and a typed (one-page maximum) sheet listing both school-related and extracurricular activities demonstrating accomplishments and leadership capabilities.
- 6. Mail all documents to: "Lillard Scholarship" or "Plentl Scholarship", c/o Virginia Department of Aviation, Attn: Betty Wilson, 5702 Gulfstream Road, Richmond, VA 23250-2422.

PRESIDENT'S NOTES

The NASA Langley Research Center's Office of Communication & Education (OCE) is working in collaboration with the Virginia Department of Aviation.

The following web sites are great places to see what is available from NASA Langley Distance Learning initiatives:

Grades K-5 Aeronautics

NASA Kids' Science News http://ksnn.larc.nasa.gov/35newsbreaks.cfm

http://ksnn.larc.nasa.gov/pokemon/

Grades 3-5

NASA Sci-Files http://scifiles.larc.nasa.gov

Grades 6-8

NASA CONNECT http://connect.larc.nasa.gov

All Grades levels & Adult Learners

NASA Live http://live.larc.nasa.gov

Adult Learners

Destination Tomorrow http://destination_larc.nasa.gov

Peter D. Thomas (ViGYAN, Inc.) Aerospace Education Programs Manager Office of Education

NASA Langley Research Center

http://edu.larc.nasa.gov





VASEFAVIATION EDUCATION NEWS

is published quarterly in support of aviation education in the Commonweath of Virginia by the Virginia Department of Aviation.

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Please send story ideas, photographs, calendar events, and other items for possible inclusion to:

Betty Wilson
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250-2422
(804) 225-3783
(804) 236-3635 (FAX)
betty.wilson@doav.virginia.gov (E-mail)
http://www.doav.virginia.gov (Web site)



VASEFPURPOSE

The Forum is a non-profit organization to promote and foster aviation and space education among public and private schools, colleges and universities, and community and civic groups, and to promote increased public understanding of aviation and space and their economic, social, and career values in our society and in the Commonwealth of Virginia.

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Virginia Airport Operators Council

John R. Lillard

Aviation Scholarship Program Application

Award Amount: \$3,000.00

Deadline for Application: Friday, February 17, 2006

Applicant Information:

Name:	Home Phone: ()
Mailing Address:	
High S	School Information:
Name of High School:	
Address:	
Telephone Number: ()	Date of Graduation:
High	School Certification:
As verified by the attached high school grade transcript, I l GPA in all completed courses to date.	hereby certify that the above named student has maintained at least a 3.75
Name and Title of High School Official (Typed or Printed)	Signature and Date
Post Secondar	ry Acceptance Certification:
As verified by enclosed documentation, I hereby certify the	at the above named student is enrolled in or accepted for enrollment in the
progra	am at
	(Accredited institution)
Name and Title of High School Official (Typed or Printed)	Signature and Date
Stateme	ent of Financial Need:
Describe why you need this scholarship:	

Regional Airline Association Foundation, Inc. Awards Scholarships

Applications for the first annual Regional Airline Association Foundation, Inc. have been received and awards should be made at the Annual Fall Membership Meeting. Students who are currently attending Regional Airline Association member universities may want to keep this scholarship in mind for next year.

Purpose: The primary purpose of the Regional Airline Association Foundation Scholarship is to assist with the education of individuals who are studying for a career in the airline industry by providing financial support. Scholarship: Up to two (2) annual scholarships may be awarded in amounts of \$750 per recipient. RAA plans to award the two scholarships to students attending Regional Airline Association member universities or colleges. Scholarships will be awarded without regard to gender, race, religion or national origin.

Scholarship Requirements: Applicants must meet the following requirements to be considered for the scholarship: 1. Applicants must be officially enrolled in a Regional Airline Association member accredited college or university in a program leading to a career in the airline industry at the time of application and award. The 2005 RAA member accredited colleges and universities are Averett University (*in Virginia*) and University of North Dakota. Applicants will be considered from other programs majors, if the applicant's goal of a career in airline management can be demonstrated through work experience or the personal essay; 2. Applicants must possess a minimum cumulative 2.5 grade point average on a 4.0 scale at the time of the application. An official transcript reflecting grades through the previous academic year at high school, college or university must accompany the application; 3. A career essay (maximum 500 words) describing the applicant's interests in the airline industry; 4. A faculty recommendation must accompany the application; 5. A copy of the student's current Student Aid Report (SAR); and 6. Applications must be typed and postmarked by October 15" of the relevant year.

Scholarship Criteria: The following criteria are used for the ranking of applicants for the RAA Foundation Scholarship:

- 1. Demonstrated scholastic achievement;
- 2. Demonstrated financial need;
- 3. Demonstrated work experience, extracurricular or community activities;
- 4. Strength of faculty recommendation; and
- 5. Strength of applicant's 500-word career essay

How To Apply: RAA Member universities and colleges may submit a maximum of two (2) complete student application packages by the published deadline (*this year the date was October 15, 2005*). Only completed scholarship application packages will be considered. Students may not submit their own application packages. The packages must be sent to:

Deborah C. McElroy President Regional Airline Association 2025 M Street, NW Suite 800 Washington, DC 20036-3309

When Awards Are Made: Scholarship Awards will be made at the RAA Fall Membership Meeting.

Future Scholarship Awards – RAA hopes to continue these awards and to expand its scholarship program by presenting additional or increased yearly awards, as funds permit.

National Air and Space Museum Calendar

Wednesday, November 16 through Friday, November 18, 2005, 10:00 a.m. - 3:00 p.m. (National Mall)

National Geography Awareness Week: Looking at Earth - From Above

Thursday, November 17, 2005, 8:00 p.m. - 9:00 p.m. (National Mall)
General Electric Aviation Lecture
"An Evening with Brig. Gen. Robin Olds"
Free, Tickets Required

Saturday, November 19, 2005, 10:00 a.m. - 3:00 p.m.(National Mall)
Family Day
SpaceShipOne

Thursday, December 1, 2005, 12:30 p.m. - 12:45 p.m. (Steven F. Udvar-Hazy Center)
Curator's Choice
The X-35B Joint Strike Fighter
Dik Daso

Wednesday, December 7, 2005, 12:00 - 12:15 p.m. (National Mall)
Curator's Choice
Fly Now! Posters that Want to Make You Fly
Joanne London

Wednesday, December 14, 2005, 12:00 p.m.
-12:15 p.m. (National Mall)
Curator's Choice
Rutan Voyager
Non-Stop Around the World Without
Refueling
Russell Lee

Thursday, December 15, 2005, 12:30 p.m. - 12:45 a.m. (Steven F. Udvar-Hazy Center)
Curator's Choice
The Apollo Lunar Spacesuit and
Equipment
Amanda Young

Wednesday, December 21, 2005, 12:00 p.m. -12:15 p.m. (National Mall)
Curator's Choice
Von Braun Disney Space Station Model
Michael Neufeld

For more information visit: www.nasm.si.edu.



Willard G. Plentl, Sr..

Aviation Scholarship Program Application

<u>Award Amount: \$1,000.00</u> <u>Deadline for Application: Friday, February 17, 2006</u>

Applicant Information:

Name:	Home Phone: ()
Mailing Address:	
High Schoo	l Information:
Name of High School:	
Address:	
Telephone Number: ()	Date of Graduation:
High School	l Certification:
As verified by the attached high school grade transcript, I hereby GPA in all completed courses to date.	certify that the above named student has maintained at least a 3.50
Name and Title of High School Official (Typed or Printed)	Signature and Date
Post Secondary Acc	ceptance Certification:
As verified by enclosed documentation, I hereby certify that the a	bove named student is enrolled in or accepted for enrollment in the
program at	
	(Accredited institution)
Name and Title of High School Official (Typed or Printed)	Signature and Date
Statement of	Financial Need:
Describe why you need this scholarship:	

Aviation Education Corner

Where is North? The Compass Can Tell Us...

Aeronautics: An Educator's Guide with Activities in Science, Mathematics, and Technology Education (NASA)

Objectives

The students will:

Build a compass.

Determine the direction of north, south,

east, and west.

Standards and Skills



Science

Science as Inquiry Physical Science Earth and Space Science Science and Technology

Science Process Skills

Observing Interferring Making Models

Mathematics

Connections

Verifying and Interpreting Results

Prediction



The compass has been used for centuries as a tool for navigation. It is an instrument that aligns a free pivoting bar magnet (called the needle) in Earth's magnetic

Since the invisible lines of the magnetic field are oriented in a north/south direction, the needle will orient itself in a north/ south direction. The other cardinal points of the compass (east, west, and south) are defined in relation to north.

Pilots use a compass to determine direction when flying airplanes. Boaters, hikers, and hunters are examples of other people who rely on compasses.

Materials

Paper clips

Fourpenny (4p) finishing nail

Shallow dish or pan 15-30 cm diameter

Liquid soap Magic markers

Styrofoam cup, .25 L capacity

Scissors Magnet

Management

Activity

Students can participate in this activity in a variety of ways:

- 1. Students can build a single compass
- 2. Teams of 3-5 students can

build team compasses

- 3. Students can build individual compasses.
- 1. Fill a shallow dish with water.



2. Cut the bottom out of the cup and float in on the water.

3. Place one drop of liquid soap in the water.

This will reduce the surface tension friction and will keep the Styrofoam disk from attaching itself to the container wall.

4. Magnetize the compass "needle" by

rubbing it in one direction on a small

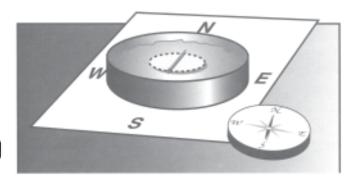
- 5. Place the magnetized compass needle on the floating Styrofoam disk. To minimize compass errors, place the compass away from metals, magnets, or electrical wiring.
- 6. Ask students to observe the compass needle as it aligns parallel with the invisible magnetic field.
- 7. Discuss ways to verify which end of the needle is pointing north and which end is pointing south. (Sunrise, sunset, shadows, commercial compass).
- 8. Place a piece of metal near the compass and observe changes in the needle orientation.
- 9. Write or cut the letter "N" and position to indicate the north direction. Follow this by placing the letters "S", "E", and "W" around the edges of the compass.

Assessment

Identify an object in the classroom and ask students to state what direction the object is from the compass.

Extensions

- 1. Hide "prizes" at different locations in the classroom. Have students locate the prizes using a compass while following teacher's directions (north, south, southeast, etc.).
- 2. Name different areas of the school, and have students determine the area's cardinal direction. (north, south, etc.).



First LCASE A Success!

Leaders in aviation and space education met September 27-28 for the first Leadership Conference on Aviation and Space Education. (LCASE) The National Coalition for Aviation Education hosted the conference which brought together leaders in education, government, industry, and businesses, to address challenges, and strategies for aviation and space education programs. "It was rewarding to see everyone together at this conference trying to connect resources across the board," said Deborah Huffman, aeronautics instructor, Fernbank Science Center and conference attendee.

David Mandell, chief of staff, Federal Aviation Administration presented the keynote address on building the foundation for the workforce of tomorrow.

Attendees addressed challenges in developing math and science skills in the classroom and the need to associate math and science with aviation and space. The conference identified and encouraged the creation of resources to meet the needs of educators. According to Huffman, sharing up to date curriculum resources was most important to the success of LCASE.

"The conference was a success because it was the right people, the right time and the right subject – aviation and space education," said Shelia Bauer, national aviation education program manager, Federal Aviation Administration, and LCASE speaker. Speakers included policy makers from the U.S. Department of Education, Civil Air Patrol, NASA, NASAO, leaders of successful programs, and industry executives who support aviation and space education. Topics discussed included

educational policy, workforce development, implementation of education programs, and case studies of successful programs.

LCASE resulted in insight into new aviation and space education resources. Overall, attendees were pleased with the success of



The Virginia Aviation Museum

<u>Select Saturdays, 10:00 a.m. - 2:00 p.m.</u> High Flying Craft Days

Explore the exciting world of aviation and aerodynamics through crafts you make and take home. Recommended for ages 4-12, but we'll have fun stuff for the really little ones too!

Saturday, December 17, 2005 First Flight Celebration

Featuring reproductions of the Wright Brothers' test gliders and the 1903 Wright Flyer. Kids, build your own model Wright Flyer!

The Virginia Aviation Museum is located at the entrance to Richmond International Airport.

For additional information on museum hours and programs call (804) 236-3622.

LCASE. "The outcome of the conference will help us link aviation and space education to the nation's future aviation workforce," said Bauer.

LCASE is a segue to the National Conference on Aviation and Space Education (NCASE) which will be held at the Crystal Marriott Hotel in Arlington, VA on October 19-21, 2006.

For more information visit: www.ncase.info



SCIENCE MUSEUM OF VIRGINIA CALENDAR

EXHIBITIONS

New Permanent Exhibits:

Computer Bits and Pieces Light Vision: Eye Sight to Star Light Newton in Space: Bodies in Motion

Temporary Exhibits:

Dogs: Wolf, Myth, Hero, and Friend - thru Jan. 2, 2006

IMAX FILMS

Wolves

Solar Max

The Polar Express (Nov. 25-Jan. 6, 2006)

<u>CARPENTER SCIENCE THEATRE</u> <u>COMPANY</u>

The Lion, the Witch, and the Wardrobe (Nov. 19-Jan. 1, 2006)

LIVESKY: Informal "live" planetarium presentation of the month's celestial events. Third Friday of every month (except Oct.)

SKYWATCH: Third Friday of every month (weather permitting) on the front lawn.

24-Hour Information: (804) 367-0000 Box Office: (804) 367-1080 24-Hour Skywatch Information: (804) 367-8277 24-Hour TDD Information: (804) 367-9760 General Information - TDD: (804) 367-6552 Group Scheduling: (804) 367-6552 Home Page: http://www.smv.org

VIRGINIA AIR AND SPACE CENTER CALENDAR

EXHIBITS:

Adventures in Flight Gallery

TRAVELING EXHIBITS:

Science in Toyland

IMAX FILMS:

Magnificent Desolation:Walking on the Moon in 3D

Everest

Mysteries of Egypt

The Polar Express (opens Nov. 24) Harry Potter: The Goblet of Fire (opens Nov.

18)

SIGMA SERIES LECTURES

Biography of Neil Armstrong, by Jim Hansen Thursday, December 1, 2005, 7:30 p.m.

X-Prize Flights: SpaceShipOne by Douglas Shane Thursday, January 5, 2006, 7:30 p.m.

LIVE SCIENCE DEMONSTRATIONS

Star Station One: International Space Station Learn about the International Space Station.

Call (804) 727-0900 for showtimes Visit the Center's Home Page: http://www.vasc.org

Calendar of Events

November 19, 2005

Test Pilots: The Right Stuff, a forum featuring test pilots talking about their remarkable profession, will take place from 10:30 a.m. - 4:00 p.m. at the Virginia Aviation Museum located at the entrance of Richmond International Airport. For more information or to register, call (804) 236-3622.

December 13, 2005

Virginia Aviation Board Workshop will be held beginning at 3:00 p.m., in Fredericksburg, Virginia (location TBD). No formal actions by the Board will be taken at any of the above workshops. Workshops will be held unless otherwise notified. All formal actions will take place during regular meetings. For additional information contact Carolyn Toth, Administrative Assistant, (804) 236-3637.

December 14, 2005

Virginia Aviation Board Meeting will be held beginning at 9:00 a.m., in Fredericksburg, Virginia (location TBD). For additional information contact Carolyn Toth, Administrative Assistant, at (804) 236-3637.

December 17, 2005

102nd Anniversary of Powered Flight will be celebrated at the Wright Brothers National Memorial located in Kill Devil Hills, N.C. For more information visit www.firstflight.org.

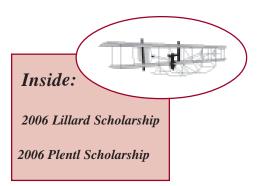
Visit <u>www.doav.virginia.gov/calendar.htm</u> for more events.

Aviation Education Supporters:

VASEF projects are funded by our membership fees and by donations from our member organizations. We would appreciate your support through membership in our organization.
Regular Membership \$25.00 annually (July - Dec. \$12.50)
Non-Profit Organization \$25.00 annually (July - Dec. \$12.50)
Corporate Membership \$100.00 annually (July - Dec. \$50.00)
New Member Renewal
Date:
Name:
Name of Organization:
Occupation:
Address:
City: State Zip
Telephone
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